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REMARKS

This Reply is in response to the Office Action mailed on July 28, 2006 in which claims 10, 13-18, 21, 22, 25-29 and 32 were objected to and in which 1-9, 11, 12, 19, 20, 23, 24, 30, 31 and 44 were rejected. With this response, withdrawn claims 33-43 and 45-49 are canceled; claim 10 is amended and claims 50-52 are added. Claims 1-32, 44 and 50-52 are presented for reconsideration and allowance.

I. Objection to the Specification

Section 2 of the Office Action objected to the disclosure requesting at Applicants provide the co-pending US application number. Paragraph [0001] is amended to add such information. Accordingly, Applicants request that the objection be withdrawn.

II. Objection to the Drawings

Section 3 of the Office Action objected to the drawings by asserting that the "first structure includes a first surface obliquely ... or at least one of the first or second service extends oblique" (see claim 21-22 and 32 must be shown in the drawings.

Applicants respectfully note that the drawings do illustrate a first structure or one of a first structure and a second structure including an oblique surface. Figures 7-9 each illustrate an example surface 333 which is oblique to axis 242. Accordingly, Applicants respectfully request that the objection to the drawings be withdrawn.

III. Claim Objections

Section 4 of the Office Action objected to claims 1, 3-5, 8 and 10 asserting several informalities.

A. Corresponding Specification References to Examples of Claim Terms

The Office Action requested that the reference numerals of example structures in the specification that correspond to selected claim limitations be provided. Applicants respectfully note that these are simply examples and the claims are not to be construed as limited to the example embodiments.

First structure 258; second structure 256 (illustrated as part of a first support assembly 290 in Figure 6)

third structure 258, fourth structure 256 (illustrated as part of a second support assembly 290 in Figure 6)

first threaded portion 294, second threaded portion 308, third threaded portion 332 (illustrated as part of a first support assembly 290 shown in Figures 6 and 7)

fourth threaded portion 294, fifth threaded portion 308, sixth threaded portion 332 (illustrated as part of a second support assembly 290 shown in Figures 6 and 7)

B. Claims 1, 8, 23 and 44

The Office Action repeatedly expresses confusion regarding the recitation of an "axis". The Office Action repeatedly and mistakenly presumes that an "axis" must be either an X-axis or a Y-axis. There is no basis for so limiting the claims. As one of ordinary skill in the art knows an axis is simply a line. The phrase "both directions along a first axis" means what it says. For example, both directions along a horizontal axis would be (1) left or (2) right. Both directions along a vertical axis would be (1) up or (2) down. Likewise, an axis does not necessarily have to be horizontal or vertical. In the particular example illustrated, the exemplary axis is labeled with reference numeral 242 as seen in Figure 8. Both directions along an axis 242 would mean that it is retained against movement either upward or downward as seen in Figure 8. Accordingly, the objection to claims 1, relate, 23 and 44 should be withdrawn.

C. Claims 1 and 3-10

The Office Action asserts that such claims are unclear because the Applicants recite one electronic component in line 3 of claim 1 and further recites the other of the component. Applicants respectfully note that claim 1 is clear. Claim 1 recites that "the first structure is movably coupled to one of the electronic point and the circuit board for movement in a direction perpendicular to the first axis at lease prior to being coupled to the other of the electronic opponent in the circuit board." This limitation in the claim should be properly construed such that the first structure may either be movably coupled to the circuit board (one of the electronic component and the circuit board) at least prior to being coupled to the electronic component (the other of the electronic component and the circuit board) or movably coupled to the electronic component (one of the electronic component and the circuit board) at least prior to being coupled to the circuit board (the other of the electronic component end of the circuit board). Thus, the objection should be withdrawn.

D. Claim 3

The Office Action asserted that "a second structure ... to move at lease one direction perpendicular to the first axis" is not understood. Applicants likely note that this claim limitation means what it means, i.e. the second structure is movably coupled to one of the electronic opponent in the circuit board such a move in at least one direction perpendicular to the first axis. Applicants do not understand the confusion. Applicants presume that the Examiner understands what an "axis" is and what the term "perpendicular" means. In the example embodiment illustrated, this phrase refers to movement in a direction perpendicular to axis 242. Accordingly, the objection should be withdrawn.

E. Claims 4-5

The Office Action asserted that the phrase "the second structure ... against complete rotation about the first axis" is unclear. Applicants respectfully note that the phrase "against complete rotation about the first axis means the rotation about the axis is limited to less than 360°. One of ordinary skill in the art would understand that complete rotation about an axis is

360°. Applicants further refer the Examiner's attention to Paragraph [0049] which describes how wings 306 prevent complete rotation about axis 242. Accordingly, this objection should be withdrawn.

F. Claim 5

The Office Action inquired as to the meaning that the second structure is "keyed". Applicants respectfully note that Claim 5 in full recites at the second structure is keyed to said one of the electronic opponent and the circuit board against complete rotation about the first axis. As one of ordinary skill in the art knows, a key is a mechanical device for holding or locking an assembly, wherein one structure is received within another. In the particular example illustrated, wings 306 are keyed in opening 280 to prevent complete rotation about axis 242. Accordingly, the objection should be withdrawn.

G. Claim 10

The Office Action asserted that claim 10 is unclear. In response, claim 10 is amended to address the Office Actions confusion. Those elements in the specification corresponding to the recited six threaded portions are provided above. Accordingly, Applicants believe that claim 10, as amended, is now clear such that the objection to claim 10 is overcome.

H. Claim 14

Page 5 of the Office Action asserted that claim 14 is unclear "because the power supply provided only the power to the PCB and nothing to do to cause the ' mass cantilevered'. Applicants do not understand how claim 14 is unclear. Applicants presume that the Examiner understands the term "cantilevered". A cantilevered mass would be a mass that is suspended. Applicants respectfully referred the Examiner's attention to Paragraph [0038] which describes how power supply 237 is suspended or cantilevered with respect to circuit board 222 and how this cantilevered mass is supported by support system 232 to minimize pivoting which occurs as a result of this cantilevered support arrangement. Applicants respectfully request of the objection to claim 14 be withdrawn.

I. Claim 19-20

The Office Action asserted that claims 19-20 were unclear. In particular, the Office Action asserted that the phrase "a first structure movable in a direction perpendicular to the first axis by distance of at least 0.3 mm or no greater than 0.9 mm" is not understood. Applicants do not understand the confusion. This phrase simply means that the first structure is movable in a direction perpendicular to the recited first axis by distance of at least 0.3 mm and no greater than 0.9 mm. In the example illustrated, the first structure is movable in a direction perpendicular to axis 242 by distance of at least 0.3 mm and no greater than 0.9 mm. This objection should be withdrawn.

II. Rejection of Claims 1-9, 11-12, 19-20, 23-24, 30-31 and 44 under 35 USC 102(E) Based upon Feigenbaum

Section 6 of the Office Action rejected claims 1-9, 11-12, 19-20, 23-24, 30-31 and 44 under 35 USC 102(e) as the anticipated by Feigenbaum et al. US Patent 6,614,659. For the reasons which follow, Applicants respectfully request that the rejection be withdrawn.

A. Claim 1

Claim 1 recites a circuit board assembly including a first structure coupling and electronic opponent to a circuit board and retaining the electronic opponent relative to the circuit board at a selected one of a plurality of positions in both directions along an axis perpendicular to the circuit board. Claim 1 further recites that the first structure is movably coupled to one of the electronic opponent in the circuit board for movement in a direction perpendicular to the first axis at least prior to being coupled to the other of the electronic opponent in the circuit board. An example of this arrangement is shown in Figure 9 in which structure 258 retains processor component 226 to circuit board 222 at one of a plurality of positions (as provided by the inter engagement of threads 308 and 332) in both directions along an axis 242. At the same time, prior to being connected to circuit board 222, structure 258 is movable in a direction perpendicular to axis 242 due in part to gap G.

Feigenbaum fails to disclose or suggest a circuit board assembly wherein a first structure couples electronic opponent to a circuit board and retains the electronic component relative to the circuit board at a selected one of the plurality of positions in both directions along an axis perpendicular to the circuit board and, at the same time, is movably coupled to one of the electronic opponent and the circuit board for movement in a direction perpendicular to the first axis at least prior to being coupled to the other of the electronic opponent and the circuit board. In rejecting claim 1, the Office Action characterizes receptacle 12 as a structure coupling module 18 relative to circuit board 20 at one of a plurality of positions along a first axis perpendicular to circuit board 20.

However, this is incorrect. Receptacle 12 does not retain module 18 at a selected one of a plurality of positions along an axis perpendicular to circuit board 20. In contrast, receptacle 12 and screws a 16 merely retain module 18 at a single position with respect to circuit board 22. The only time that module 18 is retained in both directions along an axis perpendicular to circuit board 20 is when screws 16 are tightened down into bosses 52. The arrangement of Feigenbaum does not provide a plurality of positions at which module 18 may be selectively retained relative to circuit board 20 in both directions along an axis perpendicular to circuit board 20. Alternatively, if the screws 16 are loose such that module 18 may be moved up and down between different positions relative to circuit board 20, then module 18 is not "retained in both directions along an axis" perpendicular to circuit board 20. Thus, the rejection of claim 1 should be withdrawn. Claims 2-9, 11-12 and 19-20 depend from claim 1 and overcome the rejection for the same reasons.

B. Claim 23

Claim 23 recites an electronic component mounting unit which includes an electronic component and a structure coupled to the electronic component and configured to be released be coupled to a circuit board to retain electronic component relative to the circuit board at selected one of a plurality of positions in both directions along an axis perpendicular to the circuit board. The structure is movably coupled to the electronic opponent for movement in a direction perpendicular to the axis at least prior to being coupled to the circuit board.

Feigenbaum fails to disclose an electronic component mounting unit having a first structure which is configured to retain electronic component relative to the circuit board at selected one of a plurality of positions in both directions along an axis perpendicular to the circuit board. As discussed above with respect to the rejection of claim 1, receptacle 12 of Feigenbaum does not retain module 18 at a selected one of a plurality of positions along an axis perpendicular to circuit board 20. In contrast, receptacle 12 and screws a 16 merely retain module 18 at a single position with respect to circuit board 22. The only time that module 18 is retained in both directions along an axis perpendicular to circuit board 20 is when screws 16 are tightened down into bosses 52. The arrangement of Feigenbaum does not provide a plurality of positions at which module 18 may be selectively retained relative to circuit board 20 in both directions along an axis perpendicular to circuit board 20. Alternatively, if the screws 16 are loose such that module 18 may be moved up and down between different positions relative to circuit board 20, then module 18 is not "retained in both directions along an axis" perpendicular to circuit board 20. Thus, the rejection of claim 23 should be withdrawn. Claims 24 and 30-31 depend from claim 23 and overcome the rejection for the same reasons.

C. Claim 44

Claim 44 recites a circuit board assembly including an electronic opponent, a circuit board and means for retaining the electronic opponent relative to the circuit board in a selected one of a plurality of positions in both directions along an axis.

As noted above with respect to both claims 1 and 3, Feigenbaum fails to disclose an electronic component mounting unit having a first structure which is configured to retain an electronic component relative to the circuit board at selected one of a plurality of positions in both directions along an axis perpendicular to the circuit board. Receptacle 12 of Feigenbaum does not retain module 18 at a selected one of a plurality of positions along an axis perpendicular to circuit board 20. In contrast, receptacle 12 and screws a 16 merely retain module 18 at a single position with respect to circuit board 22. The only time that module 18 is retained in both directions along an axis perpendicular to circuit board 20 is when screws 16 are tightened down into bosses 52. The arrangement of Feigenbaum does not provide a plurality of positions at which module 18 may be selectively retained relative to circuit board 20 in both directions along an axis perpendicular to circuit board 20. Alternatively, if the screws 16 are loose such that module 18 may be moved up and down between different positions relative to circuit board 20, then module 18 is not "retained in both directions along an axis" perpendicular to circuit board 20.

D. Claim 3

claim 3 depends from claim 1 and for the recites a first dreaded portion coupled to the other of the electronic component in the circuit board, a second structure Lee coupled to said one of the electronic component in the circuit board to move in at least one direction perpendicular to the first axis, the second structure having a second thread portion, wherein the first structure has a third dreaded portion and wherein the third credit portion is screwed to the first dreaded portion and the second threaded portion. An example of such a claim arrangement is shown in Figure 9 which illustrates threaded portion 332 screwed to threaded portion 308 and threaded portion 294.

Feigenbaum fails to disclose a third dreaded portion screwed to the first dreaded portion and the second threaded portion. The only threaded portions and Feigenbaum appear to be screws 16 and boss 52 although the Office Action characterizes whole 48 as having a second threaded portion, this characterization appears to be inaccurate. Feigenbaum specifically describes whole 48 as a through hole (column 5, line 55-56). Accordingly, the rejection of claim

3 should be withdrawn for this additional reason. Claims 4-7 depend from claim 3 and overcome rejection for the same reasons.

E. Claims 4 and 5

Claim 4 depends from claim 3 and recites that the second structure is coupled to said one of the electronic component and the circuit board against complete rotation about the first axis. Claim 5 defense from claim 4 and recites that the second structure is keyed to said one of electronic component and the circuit board against complete rotation about the first axis.

Feigenbaum failed to disclose these recited limitations. Whole 48 of Feigenbaum (characterized as the second structure) is not coupled to the electronic component against complete rotation about an axis and it's certainly not keyed against complete rotation. Thus, the rejection of claims 4 and 5 should be withdrawn for these additional reasons.

F. Claim 6

Claim 6 depends from claim 5 and recites at the second structure includes Elise one projection received within a corresponding opening formed in the electronic opponent to prevent complete rotation of the second structure about the first axis.

In rejecting claim 6, the Office Action asserts that Feigenbaum discloses a second structure (48) including at least one projection received within a corresponding opening formed in the electronic component 18. Clearly, a whole cannot include a projection. Thus, the rejection of claim 6 should be withdrawn.

G. Claim 11

Claim 11 depends from claim 1 and recites at the electronic component includes a good post and that the first structure extends within the post.

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Feigenbaum does not disclose electronic component having a post and that the first structure extends within the post. Boss 52 (characterized as the post by the Office Action) is clearly not part of module 18. Moreover, receptacle 12 (characterized as the first structure) does not extend within the post. Accordingly, the rejection of claim 11 should be withdrawn.

H. Claims 19, 20, 30, 31

Claims 19 and 30 depend from claims one and 23, respectively and recite that the first structure is movable in a direction perpendicular to the first axis by a distant and released 0.3 mm. Claims 20 and 31 depend from claims 19 and 30, respectively, and further recite that the first structure is movable in a direction perpendicular to the first axis by distance no greater than 0.9 mm.

With respect to such claims, the Office Action fails to establish a prima facie case of obviousness. The Office Action fails to even assert that Feigenbaum discloses this range of movement. Accordingly, the rejection of such claims should be withdrawn.

III. Added Claims

With this response, claims 50-52 are added and are presented for consideration and allowance. Section 7 of the Office Action indicated that claims 10, 13 and 32 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. In response, claims 10, 13 and 32 are rewritten in independent form as added claims 51, 50 and 52, respectively. Added claims 51 is further amended to address the objections to original claim 10.

IV. Conclusion

After amending the claims as set forth above, claims 1-32, 44 and 50-52 are now pending in this application.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 08-2025. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 08-2025. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 08-2025.

Respectfully submitted,

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